RESMED

Mirage Micro™

NASAL MASK

User Guide

English

RESMED
Mirage Micro™

NASAL MASK

Thank you for choosing the Mirage Micro™.

Intended Use

The Mirage Micro channels airflow noninvasively to a patient from a positive airway pressure device such as a continuous positive airway pressure (CPAP) or bilevel system.

The Mirage Micro is:

- to be used by adult patients (>30 kg) for whom positive airway pressure has been prescribed.
- intended for single-patient re-use in the home environment and multipatient re-use in the hospital/institutional environment.

Before Using the Mask

⚠ WARNINGS

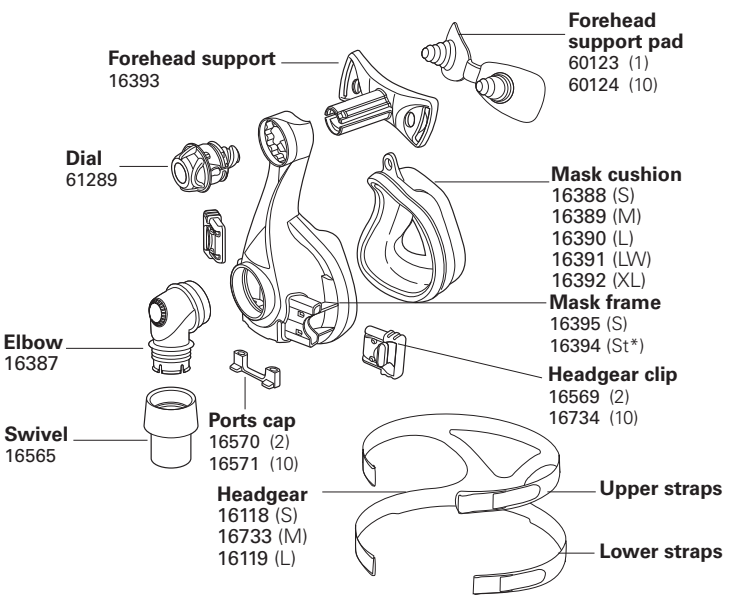
- The vent holes must be kept clear.
- Follow all precautions when using supplemental oxygen.
- Oxygen flow must be turned off when the flow generator is not operating, so that unused oxygen does not accumulate within the flow generator enclosure and create a risk of fire.
- At a fixed flow rate of supplemental oxygen flow, the inhaled oxygen concentration varies, depending on the pressure settings, patient breathing pattern, mask, point of application and leak rate.
- The technical specifications of the mask are provided for your clinician to check that they are compatible with the flow generator. If used outside specification or if used with incompatible devices, the seal and comfort of the mask may not be effective, optimum therapy may not be achieved, and leak, or variation in the rate of leak, may affect the flow generator function.
- Discontinue using the Mirage Micro if you have ANY adverse reaction to the use of the mask, and consult your physician or sleep therapist.
- Using a mask may cause tooth, gum or jaw soreness or aggravate an existing dental condition. If symptoms occur, consult your physician or dentist.
- Refer to your flow generator manual for details on settings and operational information.

Flow Generator Settings

Select 'Standard' (or 'Vista' for AutoSet CS™ 2) as the mask option when using the Mirage Micro with ResMed flow generators that have mask setting options. For a full list of compatible devices for this mask, see the Mask/ Device Compatibility List on **www.resmed.com** on the **Products** page under **Service & Support.** If you do not have internet access, please contact your **ResMed** representative.

	Europe 2
Small (S)	**16343**
Medium (M)	**16344**
Large (L)	**16345**
Large-Wide (LW)	**16346**
Extra-Large (XL)	**16347**

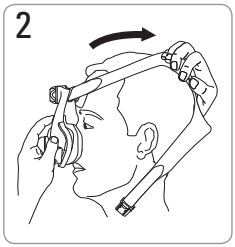
Elbow assembly (elbow, swivel): **16399**



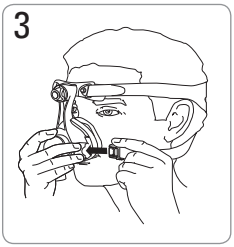
St* Standard

Fitting the Mask

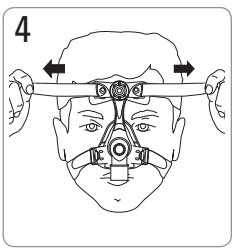
Turn the dial, so that the forehead support is fully extended.



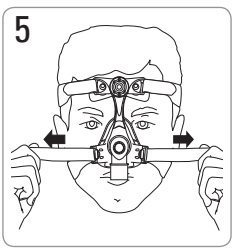
Hold the mask over your nose and pull the headgear over your head.



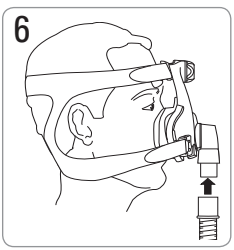
Bringing the lower straps below your ears, connect the headgear clip to the the mask frame.



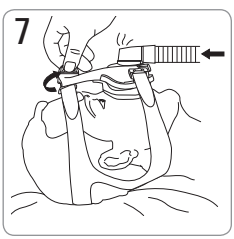
Unfasten the Velcro®, pull the upper headgear straps evenly until they are comfortable and firm, and reattach the Velcro.



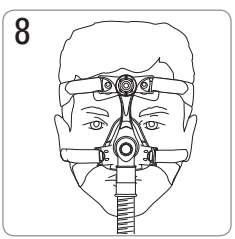
Repeat step 4 with the lower headgear straps.



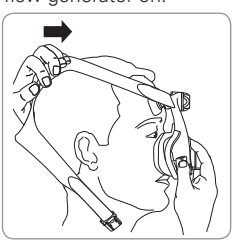
Connect the main air tubing to the swivel. Then connect the free end of the air tubing to your flow generator and turn the flow generator on.



Lie down in your sleeping position. Adjust the dial until the mask is evenly positioned on your face. It should be comfortable, with an effective seal. Adjust the headgear straps if necessary.

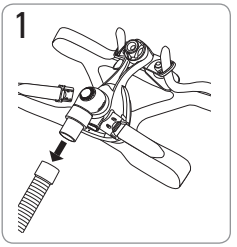


The fitted mask is shown above.

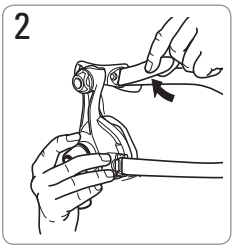


Removing the Mask
Disconnect one of the headgear clips and pull the mask and headgear up over your head.

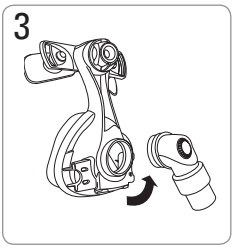
Disassembling the Mask



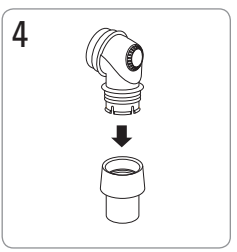
Detach the air tubing.



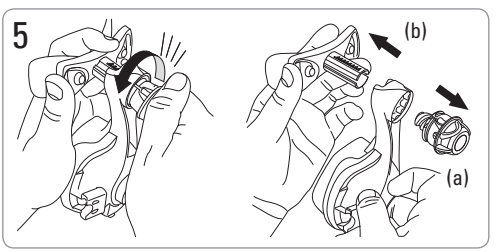
Unclip the headgear clips and unthread the upper headgear straps. It is not necessary to remove the headgear clips from the headgear.



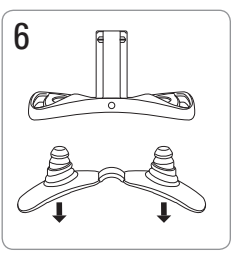
Remove the elbow assembly from the mask frame.



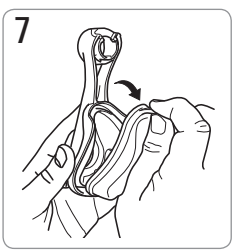
Remove the swivel from the elbow.



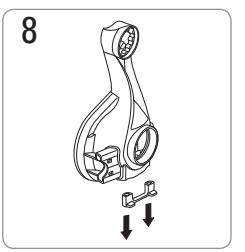
Note the position on the dial for the next time you use the mask. Unscrew and remove the dial **(a)** then pull the forehead support **(b)** out of the mask frame.



Remove the forehead support pads from the forehead support.



Remove the cushion from the mask frame.



Remove the ports cap from the mask frame.

Cleaning the Mask in the Home

Notes:

- *The mask and headgear can only be cleaned by handwashing.*
- *The headgear may be washed without removing the headgear clips.*

⚠ WARNING

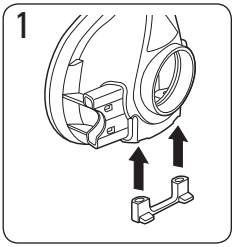
- Do not use aromatic-based solutions or scented oils (eg, eucalyptus or essential oils), bleach, alcohol or products that smell strongly (eg, citrus) to clean any of the mask components. Residual vapours from these solutions can be inhaled if not rinsed thoroughly. They may also damage the mask, causing cracks.
- Do not iron the headgear as the material is heat sensitive and will be damaged.

Daily/After Each Use
To optimise the mask seal, facial oils should be removed from the cushion before use. Handwash the mask by gently rubbing in warm (30°C) water using mild soap or diluted dishwashing detergent. If the vent requires cleaning use a soft bristle brush. Rinse all components well with drinking quality water and allow them to air dry out of direct sunlight. Do not soak the mask.
Weekly
Handwash the headgear in warm (30°C) water using mild soap or diluted dishwashing detergent. Rinse well and allow it to air dry out of direct sunlight.

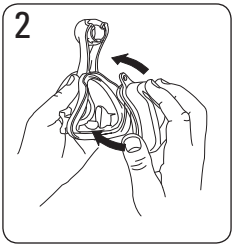
Reprocessing the Mask between Patients

This mask should be reprocessed when used between patients.
Cleaning, disinfection and sterilisation instructions are available from the ResMed website, www.resmed.com/masks/sterilization.
If you do not have internet access, please contact your ResMed representative.

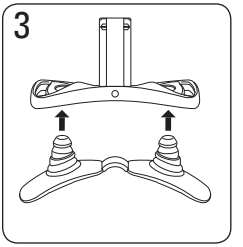
Reassembling the Mask



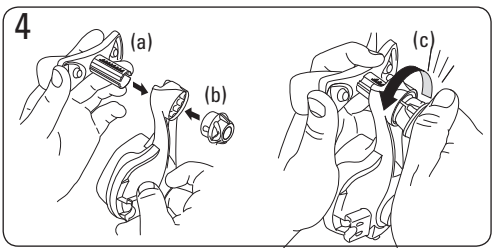
Insert the ports cap.



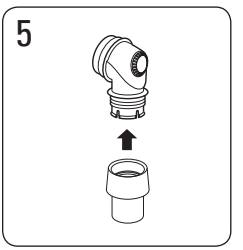
Insert the cushion into the mask frame. Ensure that the arrows at base of the cushion and mask frame are aligned.



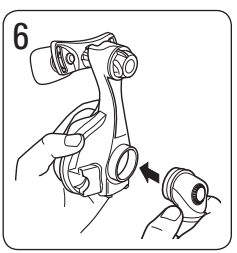
Push the forehead pads firmly into the forehead support.



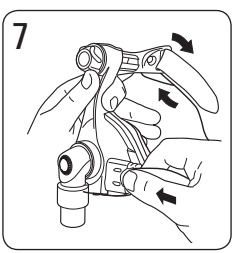
Insert the forehead support **(a)** into the mask frame and screw **(b)** the dial clockwise onto the pole. Turn the dial until it clicks **(c)**. Ensure the dial sits flush against the frame.



Insert the swivel into the end of the elbow.



Insert the assembled elbow into the mask frame.



Reattach the top headgear straps by threading them through the loops.

Flexible PVC Tubing

Flexible PVC contains elements that can be detrimental to the materials of the mask. If flexible PVC tubing is used continuously, the attachment port should be inspected for cracking. Replace any parts that are damaged.

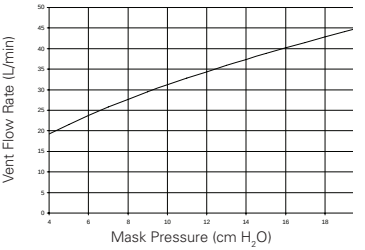
Troubleshooting

Problem	Possible reason	Possible solution
Mask won't seal properly or is uncomfortable	Mask may have been fitted incorrectly or is incorrectly adjusted.	Carefully follow instructions in "Fitting the Mask". Check headgear and dial are not over-tightened. Extend dial to apply more force to upper lip. Shorten dial to increase force at nose bridge.
	Mask is wrong size.	Talk to your clinician.
	Mask cushion is skewed in mask frame.	Check insertion of cushion and reinsert correctly according to the instructions in "Reassembling the Mask".
	Mask cushion is misaligned or creased on face.	Ensure cushion is properly aligned according to the instructions in "Reassembling the Mask". Make sure the cushion has no creases in it: undo headgear clip, check cushion and reposition the mask over your nose.
	Mask cushion may be dirty.	Clean cushion according to instructions in "Cleaning the Mask in the Home".
Mask is too noisy	Mask is assembled incorrectly.	Reassemble mask.
	Vents are blocked or partially blocked.	Clean vents according to instructions in "Cleaning the Mask in the Home".
Dial inserted into mask frame before forehead support	Misassembly.	Push dial base onto a hard surface until the dial comes out of the frame.

Technical Specifications

Note: The mask system does not contain latex, PVC or DEHP materials.

Pressure–Flow Curve	*The mask contains passive venting to protect against rebreathing. As a result of manufacturing variations, the vent flow rate may vary.*



Pressure (cm H_2O)	Flow (L/min)
4	19
8	28
12	34
16	40
20	45

Dead Space Information	The dead space of the mask varies according to cushion size. It is 128 mL for the Extra Large size.
Therapy Pressure	4 to 20 cm H_2O
Resistance	Drop in pressure measured (nominal) at 50 L/min: 0.1 cm H_2O at 100 L/min: 0.7 cm H_2O
Sound	DECLARED DUAL-NUMBER NOISE EMISSION VALUES in accordance with ISO 4871. The A-weighted sound power level of the mask is 30 dBA, with uncertainty 3 dBA. The A-weighted sound pressure level of the mask at a distance of 1 m is 22 dBA, with uncertainty 3 dBA.
Environmental Conditions	Operating temperature: +5°C to +40°C Operating humidity: up to 95% relative humidity non-condensing Storage and transport: -20°C to +60°C Storage and transport humidity: up to 95% relative humidity non-condensing
Gross dimensions	S: 140 mm (H) x 91 mm (W) x 93 mm (D) M, L, LW, XL: 155 mm (H) x 91 mm (W) x 98 mm (D) Mask fully assembled – no headgear.

Note: The manufacturer reserves the right to change these specifications without notice.

Storage

Ensure that the mask is thoroughly clean and dry before storing it for any length of time. Store the mask in a dry place out of direct sunlight.

Disposal

The Mirage Micro does not contain any hazardous substances and may be disposed of with your normal household refuse.

Symbols

⚠ Caution, consult accompanying documents; LOT Lot number; REF Part number; Temperature limitation; Humidity limitation; Does not contain latex; ⚠ Indicates a Warning or Caution and alerts you to a possible injury or explains special measures for the safe and effective use of the device.

Consumer Warranty

ResMed acknowledges all consumer rights granted under the EU Directive 1999/44/EG and the respective national laws within the EU for products sold within the European Union.

ResMed Ltd (Manufacturer) 1 Elizabeth Macarthur Drive Bella Vista NSW 2153 Australia
ResMed Corp (US Designated Agent) 14040 Danielson Street Poway CA 92064-6857 USA
ResMed (UK) Ltd (EU Authorised Representative) 96 Milton Park Abingdon Oxfordshire OX14 4RY UK
ResMed Offices Australia, Austria, Belgium, Brazil, China, Finland, France, Germany, Greece, Hong Kong, India, Ireland, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, UK, USA (see www.resmed.com for contact details).

Mirage Micro Nasal Mask
Protected by patents: AU 710733, AU 741003, AU 766623, AU 775051, AU 777033, AU 785376, CA 2261790, EP 0956069, EP 1187647, EP 1187648, EP 1187649, EP 1187650, EP 1314445, EP 1479406, HK 1057714, JP 3686609, NZ 513052, NZ 526165, NZ 526166, NZ 526167, NZ 526168, US 6112746, US 6119693, US 6357441, US 6374826, US 6439230, US 6463931, US 6532961, US 6557556, US 6581594, US 6581602, US 6634358, US 6691708, US 6823865, US 6860269, US 6871649, US 6997188, US 7011090, US 7159587, US 7178527, US 7188620, US 7216647, US 7234466, US 7243651. Other patents pending.
Protected by design registrations: AU 304309, CN 200530117106.1, EP 366844, JP 1264474, NZ 406357, US D532512, US D547439, US D545960. Others pending.
AutoSet CS, Mirage and Mirage Micro are trademarks of ResMed Ltd. AutoSet CS and Mirage are registered in U.S. Patent and Trademark Office.
Velcro is a registered trademark of Velcro Industries B.V.

CE
0120

© 2008 ResMed Ltd.

618116-Eng/1 08 09
MIRAGE MICRO
USER
EUROPE 2

6 1 8 1 1 6